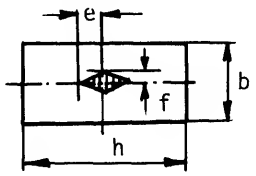
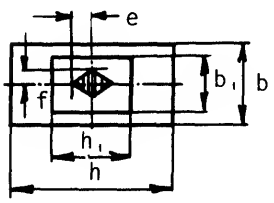
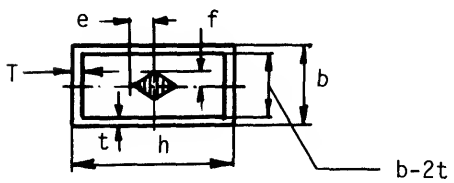
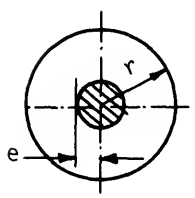
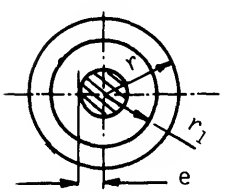
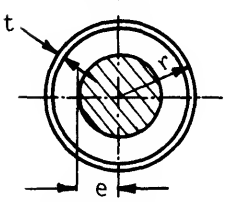
Table 19.1 Kern Limits for Compression Members

	Solid rectangular	$e = \frac{h}{6}$	$f = \frac{b}{6}$
	Hollow rectangular	$e = \frac{bh^3 - b_1h_1^3}{6h(bh - b_1h_1)}$	$f = \frac{hb^3 - h_1b_1^3}{6b(bh - b_1h_1)}$
	Thin-wall rectangular	$e = \frac{h(ht + 3bT)}{6(ht + bT)}$	$f = \frac{b(bT + 3ht)}{6(ht + bT)}$
	Solid circular	$e = \frac{r}{4}$	
	Hollow circular	$e = \frac{r^2 + r_1^2}{4r}$	
	Thin-wall circular	$e = \frac{r}{2}$ (independent of t)	

Note: Kern limit areas are defined by shaded portions of sections.